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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,497	07/24/2003	Joong Gu Woo	KBPLP0104US	1982
23908	7590	05/18/2005	EXAMINER	
RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115			FIGUEROA, NATALIA	
			ART UNIT	PAPER NUMBER
			2651	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/626,497

Applicant(s)

WOO, JOONG GU

Examiner

Natalia Figueroa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because:
 - In the specification, page 3, 4th ¶, reference numeral “105” is mentioned but not present in the figure.
 - In the specification, page 4, 2nd ¶, review “relatively chip”, and if necessary replace by -relatively cheap-.
 - In the specification, page 10, 2nd ¶, the sentence ends with two periods, delete one.
 - For figure 1, reference numerals “103” and “108” are missing in the specification.
 - For figure 2, reference numerals “201” and “202” are missing in the specification.
2. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 6 is objected because of the following informality. The claim contains subject matter, which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art to make and/or use the invention. The term “Y-shirt” is not understood by the examiner and is not described nor enabled by the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 4 contains the trademark/trade name Windows. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe an operating system and, accordingly, the identification/description is indefinite.

6. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim language is unclear to the examiner, e.g. “the computing environment of the user is implemented as its”.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 3 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Fletcher (USPN 6,791,799).

RE claim 1, Fletcher discloses a portable data storage device (abstract and figs. 2 and 5a), which equipped with a memory (fig. 2 and col. 10, lines 28-32), comprising a hard disk unit for mounting a robust hard disk of a very small size and a large capacity and controlling the same (fig. 2 and col. 11, lines 14-21 and 46-54 and col. 12, lines 25-48); a display unit for notifying a user of a state of the device (fig. 5a, col. 16, lines 41-50 and col. 24, lines 36-37); an interface unit for interfacing an external device and receiving a power from outside (col. 11, lines 2-9 and col. 24, lines 46-54); a control unit for controlling each of the units (figs. 2 and 5a and col. 16, lines 41-52); and a memory unit equipped with a ROM or RAM for providing a memory required for the control unit (fig. 2 and col. 10, lines 28-32).

RE claim 3, Fletcher further discloses that the interface unit is any one of a USB interface, parallel interface, serial interface, PCMCIA interface and IEEE 1394 interface (col. 11, lines 2-9).

RE claim 8, Fletcher further discloses that when the device is equipped with the USB or IEEE 1394 interface and a personal computer is booted in the USB or IEEE 1394 interface, the computing environment of the user is implemented as its (col. 11, lines 2-9 and col. 24, lines 46-54).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher in view of Bajorek et al (USPN 5,264,975), hereinafter Bajorek and iPod manufactured by Apple Computers, Inc. and disclosed by Apple.com (see Form PTO-892 for full bibliography).

RE claim 2, Fletcher is relied upon for the same reasons of rejection as stated above. Fletcher discloses that the hard disk unit includes a very low power consumption and robustness (col. 10, lines 2-14 and col. 12, lines 25-54); a hard disk controller controlling the operation of the hard disk under control of the control unit (fig. 2 and col. 11, lines 14-21 and 46-54 and col. 12, lines 48); and a hard disk connecting unit enabling the connection and linking between the hard disk controller and the very small-sized hard disk (fig. 2 and col. 11, lines 14-21 and 46-54 and col. 12, lines 25-48).

Fletcher fails to explicitly teach that the hard disk unit includes a very small-sized hard disk, which has a size of about 1 square inch (abstract and col. 2, lines 34-41).

Fletcher and Bajorek fail to explicitly teach a storage capacity of 1 to 100GB. However, Apple.com discloses such on (pages 1 and 2 of iPod document and Specification Sheet).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to improve the device as disclosed by Fletcher with the above teachings from Bajorek and Apple.com, the motivation being more data capacity per square inch, hence

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smaller devices with higher storage capacity therefore making digital files portable and readily available.

Furthermore, changes in size or proportion hold no patentable weight because the only difference between the prior art and the claims are a recitation of relative dimensions of the claimed apparatus and an apparatus having the claimed relative dimensions would not perform differently than the prior art apparatus. (*see In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984)).

RE claim 5, Fletcher, Bajorek and Apple.com are relied upon for the same reasons of rejection as stated above. Fletcher further discloses that the hard disk controller has inside a hard disk controller IC, the hard controller IC supporting the ATA/ATAPI mode or compact flash type (col. 13, lines 50-60).

RE claim 7, Fletcher, Bajorek and Apple.com are relied upon for the same reasons of rejection as stated above. Fletcher further discloses that the very small-sized hard disk includes a hard disk plate and a hard disk arm (fig. 3 and col. 12, lines 32-42); a hard disk dedicated controller for directly controlling the hard disk arm and the hard disk plate fig. 3 and col. 14, lines 46-58); and a hard disk connector for connecting the hard disk and the hard disk controller (col. 11, lines 14-21). Bajorek further discloses that the hard disk connector is a connector with 20 pins (figs. 3-4 and disclosure thereof).

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher in view of Apple.com.

RE claim 4, Fletcher is relied upon for the same reasons of rejection as stated above.

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Fletcher further discloses that the interface is automatically recognized as a virtual drive without turning on and off the power (col. 24, lines 45-54). Fletcher fails to explicitly teach that when connected to a windows system of a personal computer with the interface equipped. Apple.com further discloses that when connected to a windows system of a personal computer with the interface equipped (or operating system, page 2 of iPod Specification Sheet).

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher in view of Wu (USPN 6,522,534).

RE claim 6, Fletcher is relied upon for the same reasons of rejection as stated above.

Fletcher fails to explicitly teach that the portable data storage device is of a size capable of being held by the hand and put into a pocket of a Y-shirt when carried.

However, Wu discloses such on (fig. 5 and col. 2, lines 62-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to improve the apparatus as disclosed by Fletcher with the above teachings from Wu, the motivation being that the apparatus can be carried from one place to another, therefore making digital files portable and readily available.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following documents are cited to further show the state of the art with respect to portable storage devices.

- a. Robbin et al (USPN 6,799,226): Discloses a media storage device.
- b. Su (USPN 6,639,791): Discloses a portable hard drive.
- c. Battu et al (USPN 5,872,688): Discloses a miniature hard disk drive.

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d. Battu et al (USPN 6,069,766): Discloses a miniature hard disc drive.

e. Andre et al (USPN D469,109): Discloses a media player.

Bruner et al (US PG PUB 2003/0053240): Discloses a digital device.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Figueroa whose telephone number is (571) 272-7554.

The examiner can normally be reached on Monday - Thursday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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